

FURNACE-TYPE ATOMIC ABSORPTION SPECTROPHOTOMETER

Abstract of the Disclosure

A furnace-type atomic absorption spectrophotometer heats a sample by
5 controlling a heating current passed to the tube inside which the sample is held. The
temperature of the tube is monitored and the heating current is controlled, say, by a phase
control method, such that the monitored temperature will approach a specified target
temperature. The spectrophotometer includes a control unit which determines a quantity of
a specified operation for the heating control such as a firing angle by a PID control
10 calculation on the difference between the monitored temperature and a target temperature
value. PID parameters are determined such that the minimum detectable quantity can be
reduced.

FOI 2020-0201